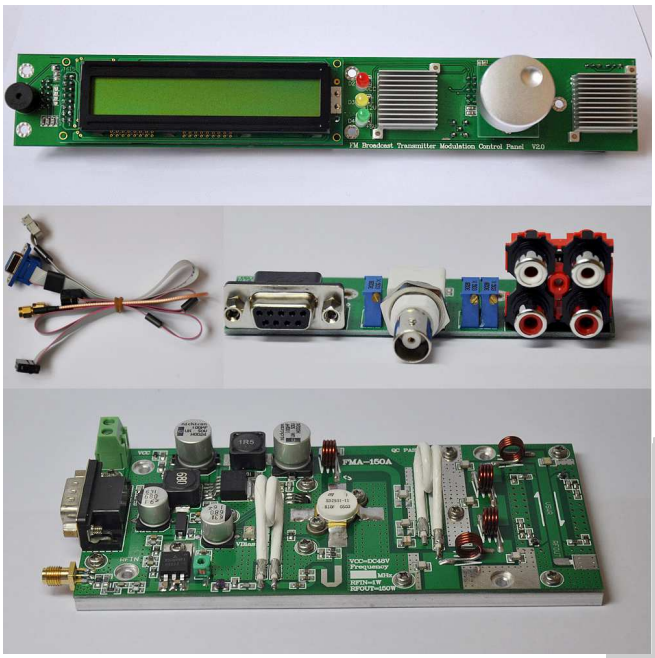
FMT Series

FM Broadcast Transmitter KIT

User Manual

FEATURES



- The Kit includes an amplifier board, a control panel board, an interface board and connection cables.
- Power adjustable: 0-30/50/80/150/300 watts
- LCD displays working frequency, volume, temperature, forward power, reflected power and SWR,
- Single knob operation.
- Automatic power control maintaining the output at any preset level
- Pre-emphasis optional at 0, 50us or 75us.
- Provided with SWR protection function and temperature protection, raise alarm prompts once meet any trouble while working.
- Aluminum heat conduction component (A larger heat sink is required when operating).

TECHNICAL SPECIFICATIONS

Power step:	1 watt (30W, step 0.1 watt)
Frequency Range:	87.5MHz to 108MHz
Frequency step:	100 KHz
Modulation mode:	WFM
Tuning Design:	Stable PLL Technology
Frequency deviation:	< ±75KHz
Harmonic:	More than 65dB
Frequency Stability:	± 10 PPm (-10 ° C to +60 ° C)
Parasitic amplitude	Less than 0.2%
Frequency Response:	50 - 15000Hz
SNR:	More than 50dB
Transmission Signal:	FM Stereo or Mono
Audio Input Level:	-15db Max: -30db
Audio Input Connect:	RCA
Stereo Separation:	More than 40dB
RF Output Impedance:	50 Ohm

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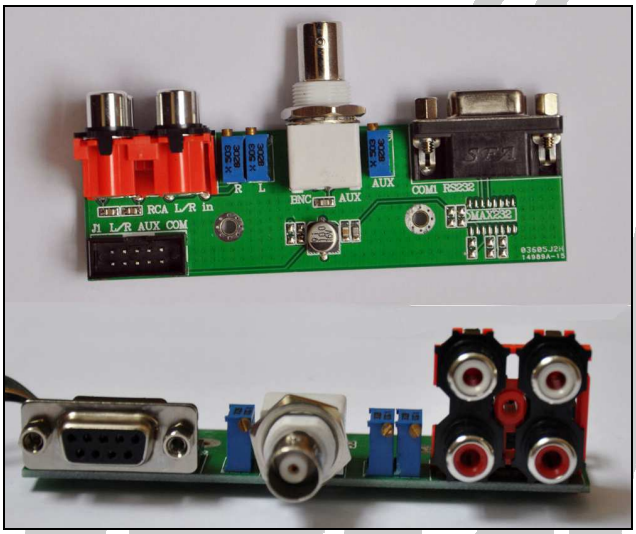
COMPONENTS

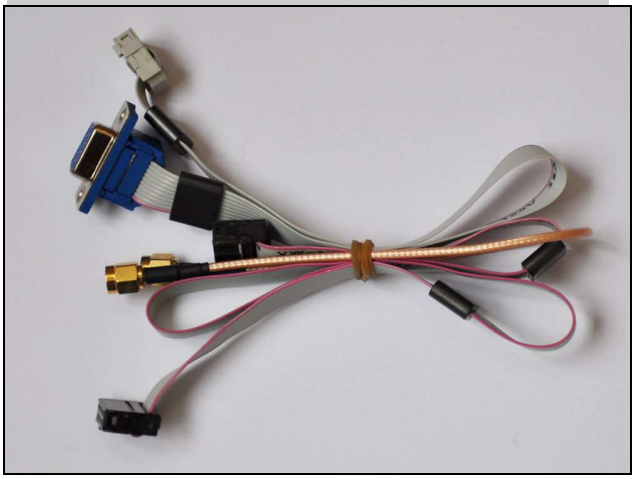
1. Control panel board

- It includes FM modulation circuit, user interface circuit, RF drive circuit, fan control circuit, auto power control circuit.
- The RF output of this board is 1 watt.



2. Interface Board

- Dual stereo audio input interface.
- RS232 port (for Program debug, optional).
- AUX interface.
- Signal input level preset potentiometer.

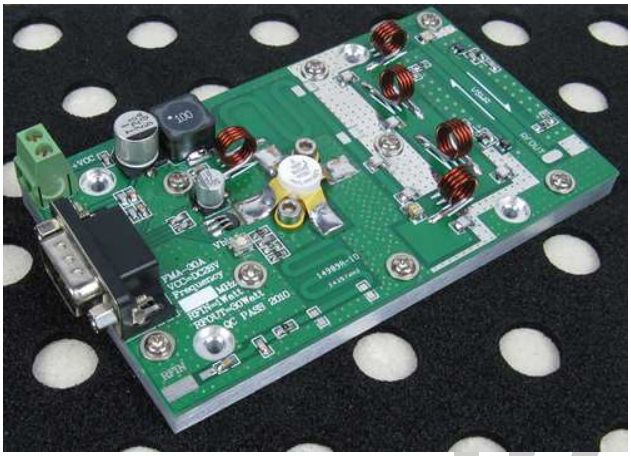


3. Connection cables

- Connect control board with amplifier board cable.
- Connect control board with interface board cable.
- RF cable: connect control board with the final stage amplifying board.
- Fool-proofing designed by color with IDC interface.

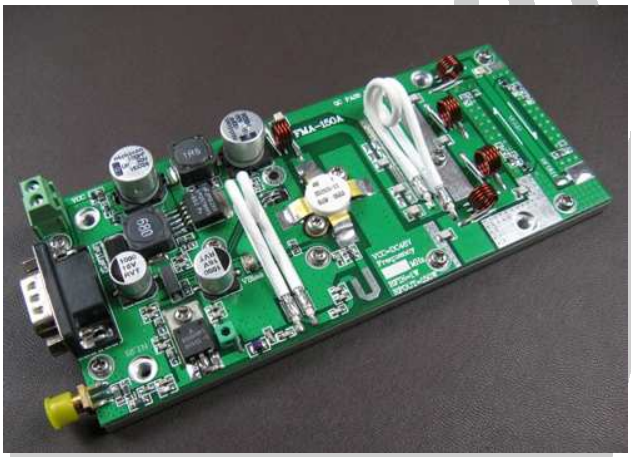
FMT SERIES AMPLIFIER BOARD

Amplifier board vary depending what you buy. Below are the details.

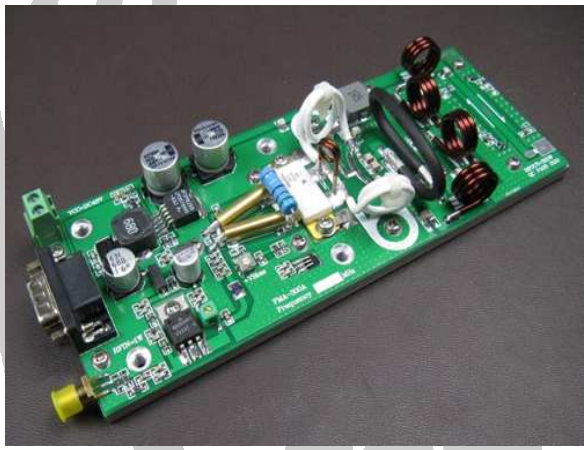


FMT-30A

FMT-50A



FMT-150A

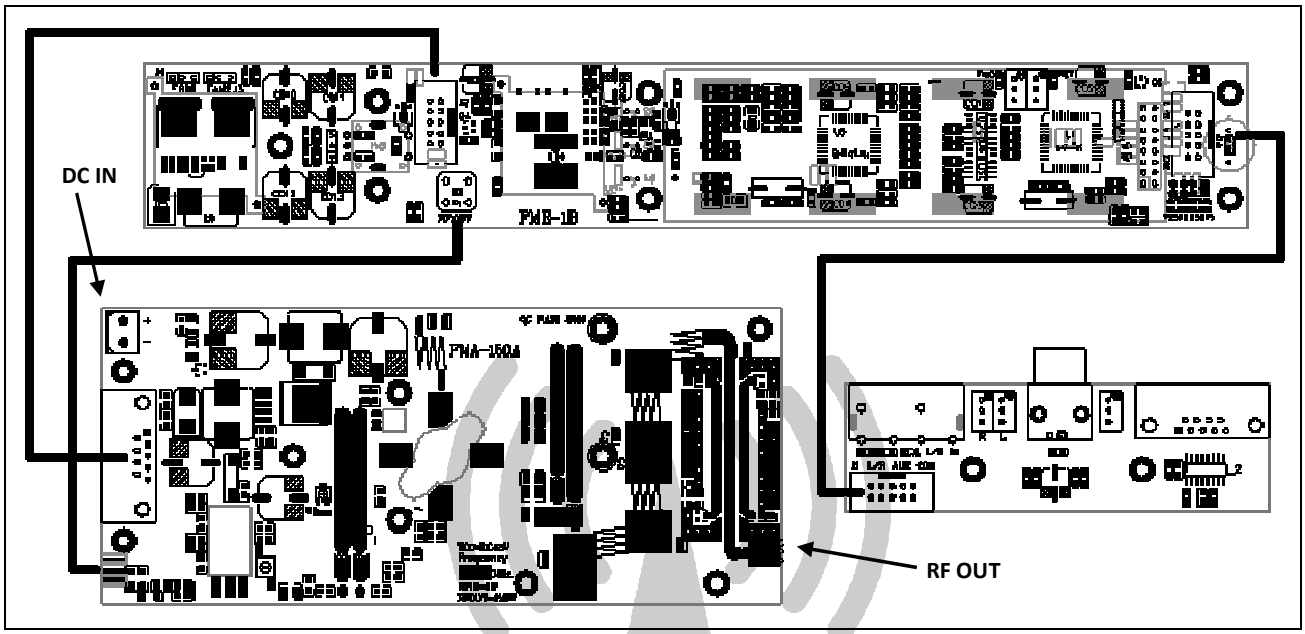


FMT-300A

AMPLIFY BOARD SPECIFICATIONS

	FMT-30A	FMT-50A	FMT-150A	FMT-300A
Input power level	1W	1W	1W	1W
Output power level	0-30W	0-50W	0-150W	0-300W
Operating voltage	DC 28V	DC 28V	DC 48V	DC 45V
Max current	3A	5A	6.6A	12A
Power tube	BLF245	MRF173	SD2931	BLF278
Heat plate	70*120mm	70*120mm	70*160mm	70*180mm
Extended heat sink need	√	√	√	√

ASSEMBLY INSTRUCTIONS



INTERFACE BOARD ILLUSTRATION

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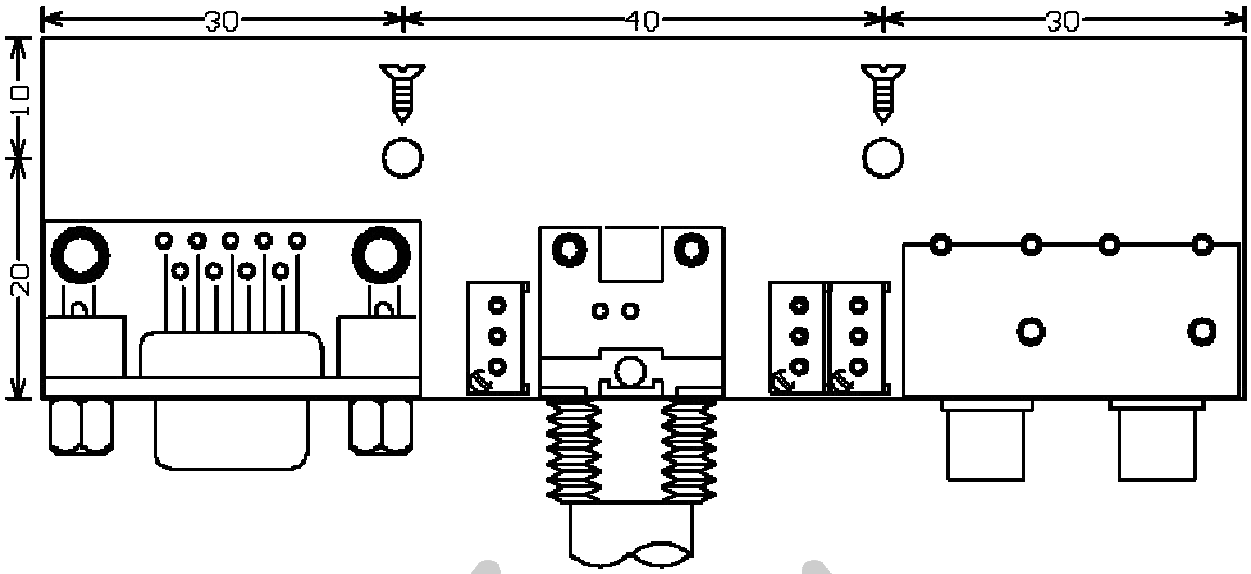
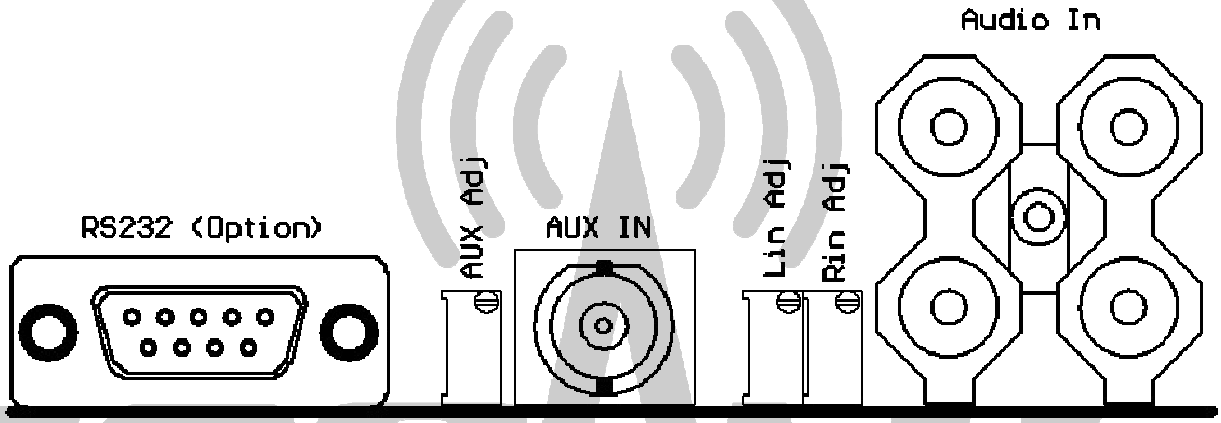
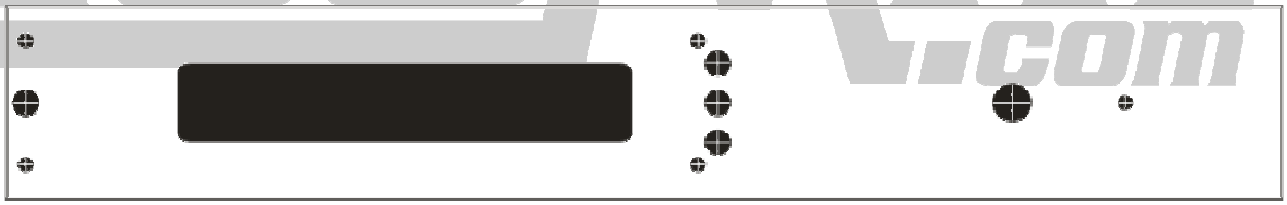


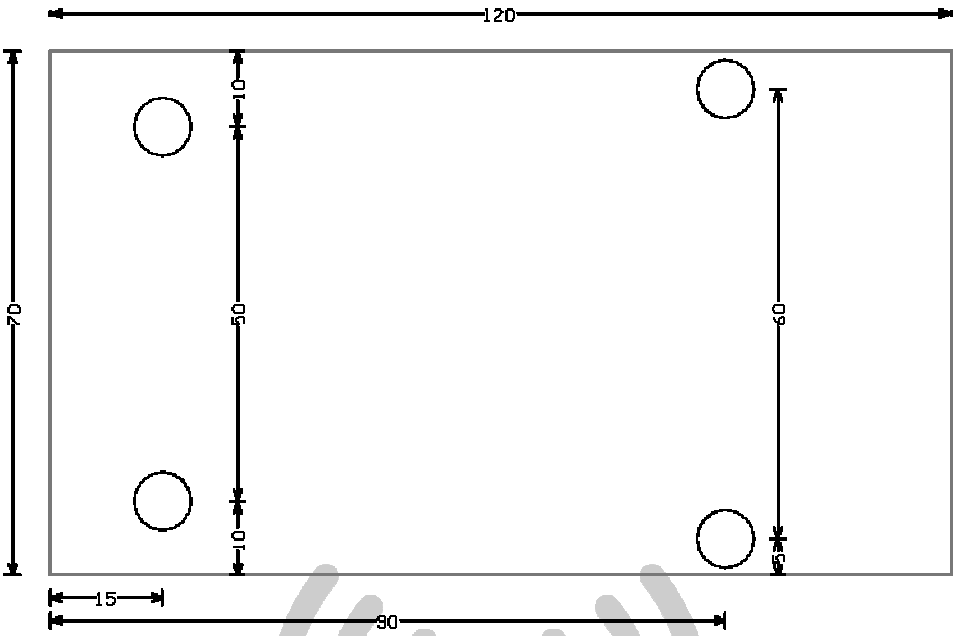


CONTROL PANEL BOARD ILLUSTRATION

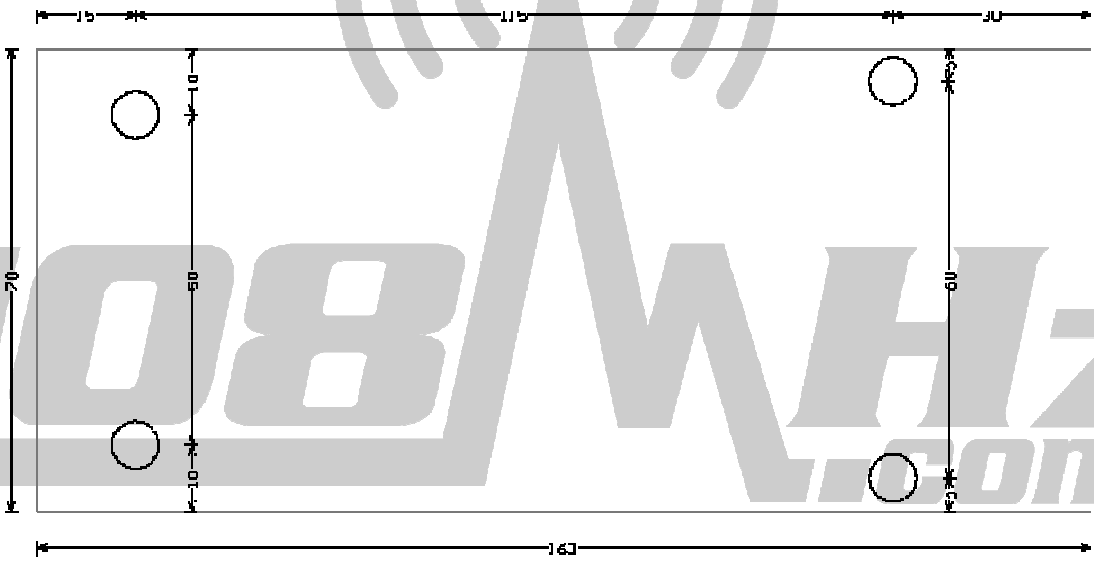


HEAT CONDUCTIVE PLATE SIZE

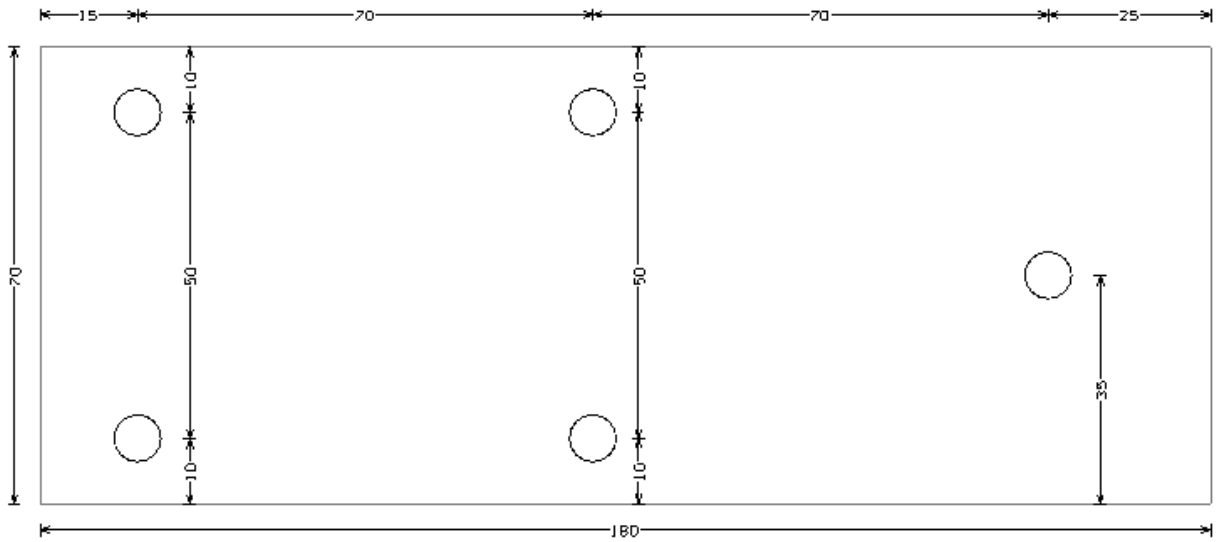
1. FMT-30A/FMT-50A



2. FMT-150A



3. FMT-300A



IMPORTANT NOTES

- **A big heat sink is required when operating.**
- **Cooling fan interfaces are provided on the control board and its operating voltage is 12V. You can use 1~2 cooling fan(s) according to your needs.**
- **Fan current should be no more than 0.5A.**
- **Please check our AN101 application note for more details.**

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Overseas Sales Department

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